

Youth advocacy/empowerment programs for tobacco prevention

Benefit-cost estimates updated December 2014. Literature review updated December 2014.

Current estimates replace old estimates. Numbers will change over time as a result of model inputs and monetization methods.

The WSIPP benefit-cost analysis examines, on an apples-to-apples basis, the monetary value of programs or policies to determine whether the benefits from the program exceed its costs. WSIPP's research approach to identifying evidence-based programs and policies has three main steps. First, we determine "what works" (and what does not work) to improve outcomes using a statistical technique called meta-analysis. Second, we calculate whether the benefits of a program exceed its costs. Third, we estimate the risk of investing in a program by testing the sensitivity of our results. For more detail on our methods, see our [technical documentation](#).

Program Description: Youth advocacy/empowerment programs encourage and empower youth to advocate for environmental changes regarding tobacco and other substance use in their communities. The program included in this analysis included weekly class sessions, a youth advocacy conference, and planning and implementation of community-advocacy projects. The program was designed to modify social influences on smoking, build awareness among youth of environmental influences on smoking, and engage youth in modification of the environmental influences.

Benefit-Cost Summary

Program benefits		Summary statistics	
Participants	(\$67)	Benefit to cost ratio	(\$6.92)
Taxpayers	(\$35)	Benefits minus costs	(\$178)
Other (1)	(\$39)	Probability of a positive net present value	33 %
Other (2)	(\$15)		
Total	(\$155)		
Costs	(\$22)		
Benefits minus cost	(\$178)		

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2013). The economic discount rates and other relevant parameters are described in our [technical documentation](#).

Detailed Monetary Benefit Estimates

Source of benefits	Benefits to				Total benefits
	Participants	Taxpayers	Other (1)	Other (2)	
From primary participant					
Labor market earnings (hs grad)	(\$66)	(\$28)	(\$33)	\$0	(\$127)
Health care (smoking)	(\$1)	(\$7)	(\$6)	(\$3)	(\$17)
Adjustment for deadweight cost of program	\$0	\$0	\$0	(\$11)	(\$11)
Totals	(\$67)	(\$35)	(\$39)	(\$15)	(\$155)

We created the two "other" categories to report results that do not fit neatly in the "participant" or "taxpayer" perspectives. In the "Other (1)" category we include the benefits of reductions in crime victimization and the economic spillover benefits of improvement in human capital outcomes. In the "Other (2)" category we include estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

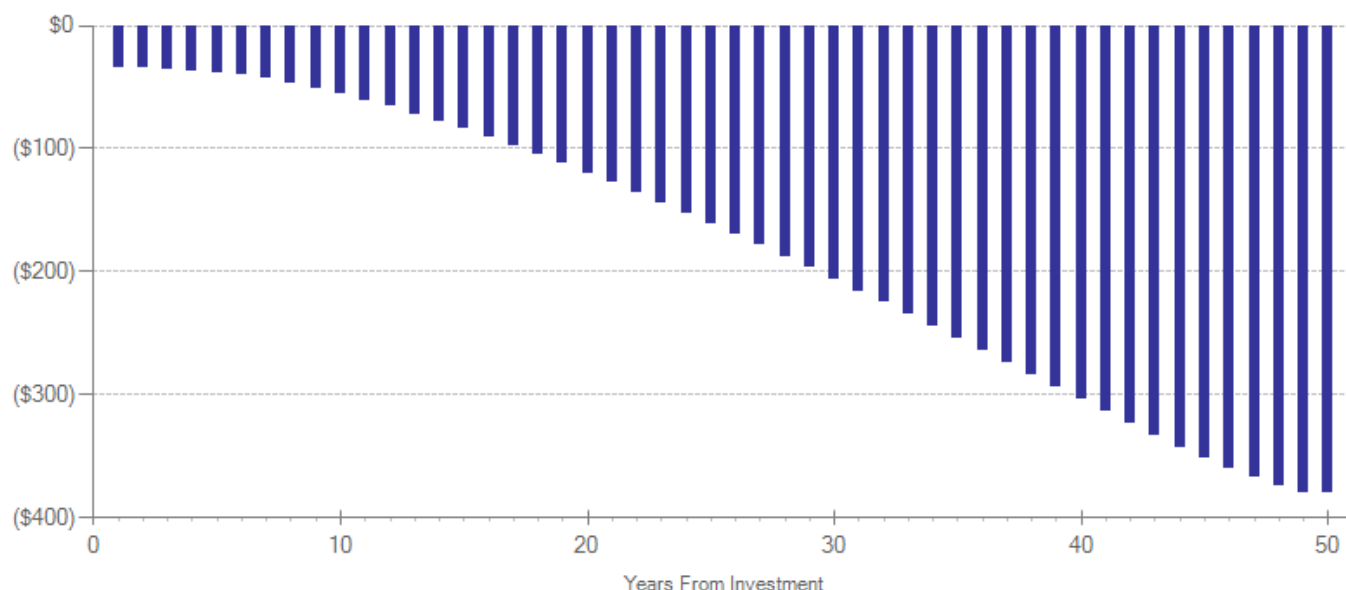
Detailed Cost Estimates

	Annual cost	Program duration	Year dollars	Summary statistics	
Program costs	\$86	1	2014	Present value of net program costs (in 2013 dollars)	(\$22)
Comparison costs	\$63	1	2014	Uncertainty (+ or - %)	10 %

Based on the following calculations and costs for Washington State: Weekly 1.2-hour long session for 20 weeks at teacher rate of 78.99/hr, plus \$300 for advocacy materials per class.

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta analysis. The uncertainty range is used in Monte Carlo risk analysis, described in our [technical documentation](#).

Cumulative Net Cash Flows Over Time (Non-Discounted Dollars)



Meta-Analysis of Program Effects

Outcomes measured	Primary or secondary participant	No. of effect sizes	Treatment N	Unadjusted effect size (random effects model)		Adjusted effect sizes and standard errors used in the benefit-cost analysis					
						First time ES is estimated			Second time ES is estimated		
				ES	p-value	ES	SE	Age	ES	SE	Age
Smoking in high school	Primary	1	367	0.014	0.420	0.005	0.017	17	0.005	0.017	18

Citations Used in the Meta-Analysis

Winkleby, M.A., Feighery, E., Dunn, M., Kole, S., Ahn, D., & Killen, J.D. (2004). Effects of an advocacy intervention to reduce smoking among teenagers. *Archives of Pediatrics & Adolescent Medicine*, 158(3), 269-275.

For further information, contact:
(360) 586-2677, institute@wsipp.wa.gov

Printed on 03-28-2015



Washington State Institute for Public Policy

The Washington State Legislature created the Washington State Institute for Public Policy in 1983. A Board of Directors—representing the legislature, the governor, and public universities—governs WSIPP and guides the development of all activities. WSIPP's mission is to carry out practical research, at legislative direction, on issues of importance to Washington State.